

Verification Report for CAR 691 – RemTec International ODS Destruction Import Project #1

Climate Action Reserve

December 2010

**Prepared by: First Environment, Inc.
91 Fulton Street
Boonton, New Jersey 07005**



TABLE OF CONTENTS

1. Introduction	1
2. Objectives	1
3. Verification Scope	1
4. Standards Used to Verify Emissions (Criteria)	1
5. Overview of the Second Verification Process	2
5.1 Conflict of Interest Review	2
5.2 Audit Team	3
5.3 Audit Kick-off.....	3
5.4 Development of the Verification Plan	3
5.5 Project Site Visit.....	3
5.6 Emissions Reduction Data and Calculation Assessment	3
5.7 Corrective Actions, Clarifications and Supplemental Information Requests.....	3
5.8 Verification Reporting.....	3
6. Project's Conformance with Verification Criteria.....	4
6.1 Project Description.....	4
6.2 Eligibility.....	4
6.3 Proof of Title	5
6.4 Additionality	6
6.5 Project Performance against Protocol/Methodology and Project Management System.....	6
6.6 Emissions Reduction Calculation Assessment.....	7
6.7 Approved Variances/Deviations.....	7
6.8 Changes Due to Errata and Clarifications Issued by CAR.....	8
7. Audit Results.....	8
8. Verification Conclusion.....	8
9. Lead Verifier Signature	9
10. Independent Internal Reviewer Signature.....	9

1. Introduction

This report is provided to Reclamation Technologies, Inc., which is also recognized by and does business under its trade name of RemTec International (RemTec), as a deliverable of the Climate Action Reserve (CAR) project verification process. This report covers the second verification of the RemTec International ODS Destruction Import Project # 1 for the period from July 16 through August 20, 2010. First Environment, Inc. (First Environment) conducted the verification from October to November 2010.

2. Objectives

The purpose of this second verification was, through review of appropriate evidence, to establish that:

- the project conforms to the requirements of the verification criteria, including all eligibility requirements, discussed in Section 4 of this report; and
- the data reported are accurate, complete, consistent, transparent, and free of material error or omission.

3. Verification Scope

Specific scope metrics for the second verification are outlined in the table below:

Geographic Boundaries	Entire chain-of-custody of destroyed ozone depleting substance (ODS) from production and storage in Monterrey, Mexico to destruction at the Clean Harbors Environmental Services Hazardous Waste Combustor in El Dorado, Arkansas, USA.
Greenhouse Gases Verified	Emissions reductions (expressed in units of carbon dioxide equivalents (CO ₂ -e)) resulting from destruction of CFC-12 (ODS); project emissions of CO ₂ e from purchased electricity, fossil fuel combustion, and fugitive emissions of replacement refrigerants.
Reporting Period	July 16, 2010 through August 20, 2010
Data Sources	Metered and monitored data, official documents and records, and emission reduction calculations.

4. Standards Used to Verify Emissions (Criteria)

The following table outlines the guidance and protocols used to conduct this verification:

Standard of Verification	Climate Action Reserve, Article 5 Ozone Depleting Substances Project Protocol - Destruction of Article 5 Ozone Depleting Substances Banks (Version 1.0, February 3, 2010), Climate Action Reserve Program Manual (March 16, 2010); and Article 5 Ozone Depleting Substances Project Protocol, Version 1.0 Errata and Clarifications (May 7, 2010)
Verification Process	Climate Action Reserve, Article 5 Ozone Depleting Substances Project Protocol - Destruction of Article 5 Ozone Depleting Substances Banks (Version 1.0, February 3, 2010), Section 8 Climate Action Reserve Verification Program Manual, June 17, 2009; ISO14064-3: Specification with guidance for the validation and verification of greenhouse gas assertions, 2006
Level of Assurance	Reasonable assurance
Materiality	Misstatements greater than five percent of the Project's emission reduction assertion are considered material; Qualitative non-conformities with the verification criteria are also considered material.

5. Overview of the Second Verification Process

To review the Project's greenhouse gas (GHG) information, the following verification process was used:

- conflict of interest review;
- selection of Audit Team;
- initial interaction and kickoff meeting with primary RemTec contact;
- development of the verification plan;
- site visit – conducted during the project's initial verification;
- review and evaluation of project documentation, raw data and calculations for period under review;
- follow-up interaction with RemTec contact for clarifications or supplemental data as needed; and
- development of the final statement and report.

The verification process was utilized to gain an understanding of the Project's emission sources and reductions, to evaluate and verify the collection and handling of data, the calculations that lead to the results, and the means for reporting the associated data and results.

5.1 Conflict of Interest Review

Prior to beginning any verification project, First Environment conducts an evaluation to identify any potential conflicts of interest associated with the project. No potential conflicts were found for this Project. First Environment also received determination of a low risk of conflict of interest from CAR in a notification dated September 28, 2010.

5.2 Audit Team

First Environment's Audit Team consisted of the following individuals who were selected based on their verification experience, as well as familiarity with ODS destruction projects:

Lead Verifier – John Mosheim, P.E.
Verifier – B. Tod Delaney, Ph.D., P.E., BCEE
Verifier - Mary Pat Campbell
Internal Reviewer – Jay Wintergreen

5.3 Audit Kick-off

The verification audit was initiated with a kick-off meeting on October 4, 2010 with the primary RemTec contact, Tim Kearney, Vice President. The meeting focused on confirming the scope, schedule, objectives of verification, and data required for verification.

5.4 Development of the Verification Plan

The team formally documented its verification plan for the second verification as well as determined the data-sampling plan. The verification plan was developed based on the discussion of key elements of the verification process during the kick-off meeting. RemTec was afforded the opportunity to comment on the key elements of the plan for verification. Based on items discussed and agreed upon with RemTec, the plan identified the First Environment project team members, project level of assurance, materiality threshold, and standards of evaluation and reporting for the verification. It also provided an outline of the verification process, established project deliverables, and presented a data-sampling plan designed to review all project elements in areas of potentially high risk of inaccuracy or non-conformance.

5.5 Project Site Visit

First Environment conducted a site visit to Clean Harbors Environmental Services during the initial verification and found it to meet the requirements of the Protocol. Similarly, First Environment conducted a site visit during the initial verification to the Quimobasicos, Mexico ODS stockpile location and found that it met the requirements of the Protocol.

5.6 Emissions Reduction Data and Calculation Assessment

This assessment used information and insights gained during the previous steps to evaluate the collected data and the reported emissions reduction quantities, and identify if either contained material or immaterial misstatements. The review also included an independent calculation of emission reductions based on raw data provided to corroborate the calculations.

5.7 Corrective Actions, Clarifications and Supplemental Information Requests

The team requested clarification requests during the verification process. RemTec provided sufficient responses to the clarification requests.

5.8 Verification Reporting

Verification reporting, represented by this report, documents the verification process and identifies its findings and results. Verification reporting consists of this report for RemTec, a verification opinion, and a list of findings to be submitted to the Climate Action Reserve.

6. Project's Conformance with Verification Criteria

6.1 Project Description

The Project consists of importation of a second rail car of virgin private stockpile of CFC-12 (R-12), an ozone depleting substance, from Mexico to the U.S. for destruction by incineration at the Clean Harbors Environmental Services (Clean Harbors) facility in El Dorado, Arkansas. The R-12 virgin refrigerant was imported from the Quimobasicos' S.A. de C.V (Quimobasicos) facility in Monterrey, Mexico where it was produced and stockpiled. The project activity consists of the collection and destruction of ODS which results in a net reduction of CO₂ equivalent emissions.

RemTec purchased and imported the rail tank car containing R-12. Clean Harbors transported the ODS material to its facility in Baton Rouge, Louisiana where it was placed into five ISO tanks containing roughly between 11.3 and 15.8 metric tons of ODS substance for an overall total of approximately 72 metric tonnes of ODS material, as weighed at Clean Harbors, Baton Rouge. The R-12 from the five ISO tanks was destroyed between July 16 and August 20, 2010.

6.2 Eligibility

The project involved the destruction of CFC-12 refrigerant from a private stockpile that can be legally sold, an eligible category under the protocol. During the initial site visit to the Quimobasicos facility, First Environment verified, through interviews with Quimobasicos staff, that the CFC-12 was from a private stockpile that can be legally sold. During the second verification, First Environment also reviewed a letter from Mexico's Ozone Unit Coordinator confirming the phase out of CFC-12 production and documentation re-confirming the ability to export the substance and that destruction is not required by law. The letter from Mexico's Ozone Unit Coordinator also states that Mexico is able to export any ODS to Montreal Protocol parties.

Additionally, First Environment reviewed a letter from the EPA that 1) acknowledged the intent to import the R-12 to the United States for destruction; and 2) documented evidence from Quimobasicos attesting to their allowance to sell CFC-12 refrigerant from their approved stockpile in Mexico.

The project's start date was May 30, 2010, when destruction of the ODS at Clean Harbors Environmental Services hazardous waste combustion facility commenced and was confirmed during verification of the Project's first reporting period. The end of the second ODS burn was August 20, 2010. First Environment reviewed the Certificates of Destruction for the five ISO tanks containing the ODS for the project and confirmed their authenticity and accuracy. Once determined as verifiable evidence, these documents were also used to confirm the project's ODS destruction dates. First Environment verified that the destruction took place over a period of less than 12 months. RemTec submitted the completed Entry Summary to U.S. Customs for the second rail tank car project on June 17, 2010, which is prior to the June 30, 2010 date required by the Protocol.

First Environment also reviewed documentation to verify that the:

- project developer and owner of GHG credits are the same for all ODS destroyed;
- qualifying destruction facility is the same for all Certificates of Destruction; and
- Certificates of Destruction are not included as part of another project.

The end fate of the ODS was destruction at Clean Harbor Environmental Services facility in El Dorado, Arkansas, which is an approved Hazardous Waste Combustor (HWC) subject to the Resource Conservation and Recovery Act (RCRA). Additionally, First Environment used interviews with Clean Harbors and RemTec during the course of the verification to inform the assessment of project's conformance with the eligibility requirements of the Protocol.

First Environment reviewed attestation, customs, and importation documentation including:

- hazardous waste manifest documentation from Point of Origin to the Destruction Facility;
- purchase order between RemTec and Quimobasicos;
- invoice issued by Quimobasicos to RemTec;
- Transfer of Title document issued by Quimobasicos that included transfer of all environmental attributes to RemTec;
- purchase order documentation between RemTec and Clean Harbors;
- entry Summary Form;
- ODS tank car GPS tracking record information; and
- selected EPA documentation.

Based on the information listed above, First Environment concluded that these documents provide sufficient evidence to establish clear ownership transfer and ODS tracking from Point of Origin to the Destruction facility.

In order to establish the project's second verification eligibility under the CAR Protocol, First Environment also relied in part on the Project Developer's Attestation of Regulatory Compliance completed by RemTec. First Environment reviewed this document during the verification process and confirmed that it was completed correctly and is on file with CAR. A written statement was also received from Clean Harbors, El Dorado, Arkansas stating it was in compliance with all applicable permits during the July 16 through August 20, 2010 reporting period.

During the site visit, First Environment also interviewed Clean Harbors' personnel with responsibility for regulatory compliance to confirm this assertion. Additionally, our review of emissions data related to ODS destruction events showed that emissions did not exceed permitted levels.

Additionally, First Environment reviewed documentation related to the importation of the ODS to assess RemTec's compliance with relevant regulations. Evidence reviewed included custom and import records, EPA documents, shipping manifests, and chain of custody documentation. This review did not identify any instances of non-compliance during the reporting period.

6.3 Proof of Title

First Environment reviewed the project's proof of ownership of the GHG reductions in the form of a purchase order for the R-12 and a detailed purchase order terms and conditions document signed by both Reclamation Technologies, Inc., dba RemTec International, and Quimobasicos

for the CFC-12 that establishes rights to any credits and offsets generated. First Environment also reviewed a signed attestation from Quimobasicos attesting to RemTec's ownership of and title to the R-12 and the greenhouse gas emission reduction credits, offsets, or other applicable environmental benefit attribute rights associated with the purchase of ODS, including Climate Reserve Tonnes ("CRTs"). Additionally, the CAR Project Developer's Attestation of Title has been completed by RemTec and is on file with CAR. First Environment reviewed the Attestation of Title during the verification process and confirmed that it was completed correctly.

6.4 Additionality

As required to pass the Protocol's Legal Requirements Test, RemTec has completed the CAR Project Developer's Attestation of Voluntary Implementation. First Environment reviewed this document during the verification process and confirmed that it was completed correctly and is on file with CAR. Documentation obtained by First Environment during the second verification indicates there have been no regulatory changes to Mexico's ODS management requirements.

In addition to the eligibility assessment discussed above, First Environment reviewed the Project's Certificates of Destruction, verified point of origin, point of destruction, and project period duration to verify that the second verification project continues to meet the project definition of the Protocol and passes the Performance Standard Test.

6.5 Project Performance against Protocol/Methodology and Project Management System

The Project was implemented in conformity with the CAR Protocol.

First Environment's Audit Team discussed and confirmed the following information during this verification process:

- the data collection process; and
- Internal documents and protocols that set guidelines for the data collection process.

Information gathered during these discussions was used to assess the project's GHG information and its controls for sources of potential errors and omissions.

First Environment verified that RemTec adequately documented the point of origin for the second verification and adequately documented the custody and ownership of the ODS throughout the entire Project activity, from point of origin in Mexico to final destruction in Arkansas. First Environment reviewed several project documents to verify the chain-of-custody of the ISO tanks including purchase orders; customs documents; official importation, exportation, and shipping documents; bills of lading; purchase order documentation; and GPS tracking records for the rail tank car used to import the ODS material from Mexico.

RemTec adequately documented ODS quantification and quantity analysis requirements. The ODS weight was appropriately determined through weighing on a single scale which was calibrated in accordance with CAR standards at the Clean Harbor's destruction facility. The scale is calibrated once per month in accordance with Clean Harbor's Air Permit requirements. Project container weights were taken within two days before and after destruction per CAR requirements.

First Environment reviewed weight tickets and calibration records for the scale to verify that the requirements of the protocol were met. Composition and concentration of the ODS were analyzed in accordance with the Protocol. In addition, RemTec provided adequate documentation of the chain-of-custody of the samples taken for analysis to the lab. First Environment also confirmed that the ODS samples were taken by a third party not affiliated with the project developer, and that the samples were taken while in the possession of Clean Harbors. Additionally, First Environment reviewed National Refrigerants Laboratory, Inc. analysis reports and shipping logs and obtained ODS sampling documentation to verify that the requirements of the Protocol were satisfied.

First Environment reviewed operating conditions monitored during the destruction of the ODS for this Project, including process operating records pertaining ODS burn start and end times, ODS feed rate, exit gas temperature, combustor pressure, and carbon monoxide emissions. The verification also included review of all process operating records associated with the ODS burn.

Additionally, First Environment reviewed the project's Monitoring and Operations Plan and determined that it meets the requirements of the CAR Protocol. First Environment also reviewed Certificate of Destruction information entered into the Reserve's software and confirmed its accuracy.

6.6 Emissions Reduction Calculation Assessment

As part of the emissions reduction calculation assessment, the Project's assumptions and calculations were reviewed. Emission reduction calculations were reviewed to ensure accuracy in the formulas and the raw data inputs used. The formulas were tested to ensure they were consistent with the calculation methodology described in the CAR Protocol.

Copies of the raw data used in the calculations, including weight tickets and sample analysis reports, were compared with the data used in the final calculations and tested for transcription or mathematical errors. All raw data sources and calculations during the second verification period were reviewed. First Environment performed recalculations of emission reductions independently using raw data from primary data sources for the second reporting period to assess whether the submitted calculations were free of material misstatement.

Calculations for baseline emissions were completed in accordance with the protocol. RemTec correctly applied the global warming potential for CFC-12 and used the appropriate standardized applicable baseline scenario 10-year cumulative emission rate of the refrigerant.

RemTec correctly calculated project emissions from substitute refrigerant. RemTec used default project emissions from ODS destruction and transportation, which were also correctly applied and calculated.

6.7 Approved Variances/Deviations.

No variances were requested or approved for the project's second verification.

6.8 Changes Due to Errata and Clarifications Issued by CAR

This report also includes the assessment of CAR's Article 5 Ozone Depleting Substances Project Protocol, Version 1.0 Errata and Clarifications (May 7, 2010) as part of the verification process.

- Ownership of CRTs: Project developer's ownership of emission reduction established. Please see Sections 6.3 and 6.4 for additional information.
- Scale Calibration: Clean Harbors calibrates its scale once per month per Air Permit requirements. Please see Section 6.5 for additional information.

7. Audit Results

Overall, RemTec provided adequate documentation for its emissions estimates, as well as its procedures surrounding the data collection process, documentation of the point of origin of the CFC-12, and documentation of the chain-of-custody of the CFC-12. To complete the verification process, First Environment requested clarification requests. The responses provided by RemTec were sufficient to resolve the issues raised by the Audit Team.

Verified results indicate that 658,307 metric tonnes of CO₂e from Vintage 2010 are eligible for registration with the Climate Action Reserve.

8. Verification Conclusion

Based on the assessments performed and the evidence collected, First Environment concludes that the Project GHG emissions reductions, due to the destruction of CFC-12 ozone depleting substance destroyed over the period of July 16 through August 20, 2010, can be considered with a reasonable level of assurance:

- consistent with the Project Methodology,
- without material discrepancy, and
- meeting the minimum level of accuracy of at least 95 percent.

Verified results* include the following emissions reductions totals:

Second Reporting Period: July 16, 2010 through August 20, 2010	Total
Baseline Emissions (tCO₂e)	738,176.
Project Emissions (tCO₂e)	79,869
Emissions Reductions (tCO₂e)	658,307

*as measured and calculated in accordance with the Project Methodology

9. Lead Verifier Signature

A handwritten signature in black ink, appearing to read "John A. Mosheim". The signature is fluid and cursive, with a large initial "J" and a stylized "A".

John A. Mosheim, P.E.
Senior Engineer

10. Independent Internal Reviewer Signature

A handwritten signature in black ink, appearing to read "James T. Wintergreen". The signature is fluid and cursive, with a large initial "J" and a stylized "W".

James T. Wintergreen
Senior Associate